USPS Pricing Engine SDK

February 8, 2017.

Summary

This is the Domestic and International Pricing Engine SDK (version 11.5.1.0) for the February 24, 2017 Release. The following is a list of enhancements included in this release.

BNS 595.5 - EDDMR_RCALC_CR v1 - Advance Pricing

The Domestic and International Pricing Engines have been updated to allow access to pricing across price changes. This change enables the Pricing Engines to apply rates, structure changes and changes to business rule for request with shipping dates beyond a pricing change deployment date. This change also allows the Pricing Engines to use rates, structure changes and business rules for shipping date prior to a price change. See scenarios below.

In previous versions of the Pricing Engine setting the Shipping Date/Time to DateTime.MinValue would result in SDC not being called. Since the Shipping Date/Time is now used to determine the correct rates "ServiceCommitmentCall" has been added to the SectionType enumerator. Including "ServiceCommitmentCall" in the ExcludeSection member of the request will result in SDC not being called.

To take advantage of this change you will need to make the following updates to the Web.Config and App.Config files. These changes should also be made to the Test Tool App.Config files.

Configuration File changes:

1. Add a the following section as a child to <configuration><configSections>

    <section name="datasourceVersions"
    type="ManTech.Usps.RateEngine.Data.DataSourceConfigurationSection,
    RateEngine_Framework, Version=11.5.0.0, Culture=neutral,
    PublicKeyToken=e4922f4e0edc8a67" />

2. Add the following section as a child to <configuration>. Make sure this section is after the <configSections> section.

    <datasourceVersions>
        <add startDate="1/22/2017" connectionVersion="R1701" />
    </datasourceVersions>

    Where "startDate" is the first date when the connection will be used and "connectionVersion" is the tag for the version. This tag is used in the connection string name. The datasourceVersion tag can contain 1 ... n children.

3. Update the connectionStrings to include the version tag.

    <add name="Domestic.Business.**R1701**" ... />

```
                    <add name="International.Business.R1701" … />
```

4. Add a NAN connection string definition to be used as a default for when the version cannot be determined.

```
                    <add name="Domestic.Business.NAN" … />
                    <add name="International.Business.NAN" … />
```

Example:

```
        <configuration>
                <configSections>
                        …
                        <section name="datasourceVersions"

        type="ManTech.Usps.RateEngine.Data.DataSourceConfigurationSection,
                        RateEngine_Framework, Version=11.5.0.0, Culture=neutral,
                        PublicKeyToken=e4922f4e0edc8a67" />
                </configSections>
                …
                <datasourceVersions>
                        <add startDate="1/22/2017" connectionVersion="R1701" />
                </datasourceVersions>

                <connectionStrings>
                        <add name="Domestic.Business.NAN"
                                connectionString="Data Source=(LOCAL);Initial
                                Catalog=USPS_DOM_2017_01;Integrated Security=True"
                                providerName="RateEngine.Data.SQLDataSource"/>
                        <add name="International.Business.NAN"
                                connectionString="DataSource=(LOCAL);Initial
                                Catalog=USPS_INTL_2017_01;Integrated Security=True"
                                providerName="RateEngine.Data.SQLDataSource"/>
                        <add name="Domestic.Business.R1701"
                                connectionString="Data Source=(LOCAL);Initial
                                Catalog=USPS_DOM_2017_01;Integrated Security=True"
                                providerName="RateEngine.Data.SQLDataSource"/>
                        <add name="International.Business.R1701"
                                connectionString="Data Source=(LOCAL);Initial
                                Catalog=USPS_INTL_2017_01;Integrated Security=True"
                                providerName="RateEngine.Data.SQLDataSource"/>
                </connectionStrings>
                …
```

SCENARIO 1:

Today's date is Jan 10, 2018 and a price changes is schedule for Jan 22, 2018.

Request: A request is made with the shipping date of Jan 12, 2018.
Result: The current rates, structure and business rules are used.

Request:	A request is made with the shipping date of Feb 12, 2018.
Result:	The Jan 22, 2018 rates, structure and business rules are used.

<u>SCENARIO 2:</u>

Today's date is Feb 2, 2018 and a price changes was deployed for Jan 22, 2018.

Request:	A request is made with the shipping date of Jan 12, 2018.
Result:	The previous rates, structure and business rules are used.
Request:	A request is made with the shipping date of Feb 12, 2018.
Result:	The current rates, structure and business rules are used.

Domestic Pricing Engine Interface Changes

PostOffice Class

GetLocations Method

Syntax (new)
GetLocations(in zipCodes : ZipCodeCollection, in shippingDateTime : DateTime) : LocationCollection

GetMailingRestrictions Method

Syntax (new)
GetMailingRestrictions(in zipCodes : ZipCodeCollection, in shippingDateTime : DateTime) :
MailingRestrictionCollection

International Pricing Engine Interface Changes

PostOffice Class

GetCountries

Syntax (new)
GetCountries(in shippingDateTime : DateTime) : CountryCollection

GetCountryInformation

Syntax (new)
GetCountryInformation(in country : Country, in shippingDateTime : DateTime) : CountryInformation

GetCountryRegulations

Syntax (new)
GetCountryRegulations(in country : Country, in shippingDateTime : DateTime) :
CountryRegulationCollection

GetCountryZones

Syntax (new)

GetCountryZones(in originZIPCode : string, in countryCode: string, in destinationPostalCode : string, in shippingDate: DateTime) : CountryZoneCollection

GetCountryZoneChart

Syntax (new)

GetCountryZoneChart(in originZIPCode : string, in shippingDate : DateTime) : CountryZoneChart

ValidateCountry

Syntax (new)

ValidateCountry(in countryID : CountryID, in shippingDateTime : DateTime) : void

BNS 595.8 - PMEI and APO/FPO/DPO PME requires a 2976-B customs form

The Customs Forms Engine has been updated to implement the following changes:

1. Priority Mail Express International mailpieces, regardless of weight and regardless of content, require a PS Form 2976-B, Priority Mail Express International Shipping Label and Customs Form. This includes mailpieces containing only documents, even if the country does not require it.
2. Priority Mail Express mailpieces sent to APO/FPO/DPO destinations, regardless of weight and regardless of content, require a PS Form 2976-B, Priority Mail Express International Shipping Label and Customs Form. This includes mailpieces containing only documents.

Impact on Existing Applications

You will not have to rebuild your applications.

Instructions

1. Copy the DLLs
2. Execute the SQL script files on the *_2017_01 databases. SQL Scripts should be executed in the order shown below.

Contents

Description	File
Folder	Database
Folder	Domestic
Folder	International
SQL Script	CR 8618.sql
SQL Script	CR 8674.sql

Folder		Libraries
	Rate Engine Framework	RateEngine_Framework.dll
	Business Framework	RateEngine_Business.dll
	Domestic Business Rate Engine	RateEngine_DomBusiness.dll
	International Business Rate Engine	RateEngine_IntlBusiness.dll
	Service Delivery Extensions	ServiceDeliveryExtensions.dll
	Customs Forms Engine	CustomsFormsEngine.dll
Design Model		Pricing Engine Design Model.pdf
Release Notes		USPS Pricing Engine SDK 11_5_1_0.pdf

Reported Defects and Change Request

ID	Title	Status